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<i>Designation</i>	:	
<i>Title</i>	:	<i>Sustaining Ecohydrological Capacity oOf Adyar Creek with Stakeholder Involvement</i>
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The beautiful Adyar River runs through Chennai for 42 km before meeting the ocean, forming an estuary, which extends from the Adyar Bridge to the sandbar, with some small islands in between. An estuary plays an important role in balancing the ecosystem of the city. The Adyar creek is a part of the natural estuarine ecosystem located right in the heart of the city. A small piece of low-lying land (behind the Government Fisheries) covered with a salt-tolerant red-green shrub, supporting diverse fauna, Surprisingly, in spite of its isolation from the man water body, the tidal effect is still felt here and the land is always wet.

One of the most dynamic of these challenges pertains to the issue of conservation of natural ecosystems within and adjacent to growing metropolitan regions. This study aims to find solutions that, rather than focusing exclusively on technical issues, to respond better to sustainable water resource policies and promote social development. It quantifies and explains the relationship between hydrological processes and biotic dynamics at a catchment scale. It also provides a way for policy-makers, governments (at both local and national levels) and civil society to work towards sustainable water resources management.

Although recent ecohydrological studies have focused on understanding interactions between hydro climatic variables and ecosystems response, yet there is a lack of a comprehensive theory on how vegetation will respond to changes in the water and energy balance of a region. This study is focused on the catchment water balance in an attempt to understand the role of vegetation on hydrological partitioning and also to ensure the effective stakeholder involvement in the conservation and maintenance of the Adyar creek.

This study considered two storm water inlets such as inlet 'A' and inlet 'B' represent runoff collection from open area and residential area. The computed runoff from urban catchment at storm water inlet 'A' and 'B' for the years 2008, 2009 and 2010 are: 69.8cm, 47.2cm & 59.8 cm (inlet A) and 98.5 cm., 83.5 cm and 120.9cm (inlet B) respectively. Catchment wetting with respect to vegetation cover was found out for the year of 2008, 2009 and 2010 as 55.8cm, 52.6 cm and 58.8 cm respectively. Therefore the wetting has been improved from 2008 to 2010 due to planted vegetation.